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**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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08/117,363 09/03/93 COOK

P ISIS1169

18N2/1213

EXAMINER

HOUTTEMAN, S

ART UNIT

PAPER NUMBER

1809

23

DATE MAILED:

12/13/96

 JOSEPH LUCCI
WOODCOCK, WASHBURN, KURTZ,
MACKIEWICZ & NORRIS
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 This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS
OFFICE ACTION SUMMARY
☒ Responsive to communication(s) filed on 4-29-96 + 5-22-96
☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

 A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).
Disposition of Claims
☒ Claim(s) 1-29 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-29 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.
Application Papers
☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.
Priority under 35 U.S.C. § 119
☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
Attachment(s)
☒ Notice of Reference Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 21, Filed 5-22-96
☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

- SEE OFFICE ACTION ON THE FOLLOWING PAGES -

1. The Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to:

Art Unit: 1809

Examiner: Scott Houtteman

2. Applicant's comments in the interview on June 7, 1996 has been carefully considered with the following effect:

The objection and rejections of paragraphs 17, 18, 20, 22 and 24 Office action mailed 12/11/95, have been withdrawn in view of applicant's amendments.

The following are new grounds of rejection.

3. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

4. Claims 1-29 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-29 of copending application Serial No. 08/464,953. This is a *provisional* double patenting rejection since the conflicting claims have not in fact been patented.

5. Claims 1-15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. Claims 1-15 and 36-39 are indefinite in that it is not clear whether the 3'-O-position or the 5'-O-position are only at the terminal positions of the compound or whether they can be part of the linkage. Amendment is suggested to add the word "terminal" before 3' and 5'.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

7. Claims 1-4, 6-18, 20-29 and 36-39 rejected under 35 U.S.C. § 103(a) as being unpatentable over Urdea et al., US Pat. 4,910,300, 3/1990 (Urdea) in view of Carico, US Pat. 4,743,535, 5/1980.

Claims 1 and 16 are drawn to compounds and nucleosides comprising a ribofuranosyl sugar bearing at a 2', 3' or 5'-O-position, a substituent having the formula, for example alkyl-NH₂-.

Urdea et al. teaches a 5'-O-position having an R1 substituent (see Urdea bottom of col 10). R1 is defined at col. 4, line 4 as an amine. The claims differ from Urdea in the recitation of an alkyl group between the oxygen and the nitrogen.

However, Carrico discloses that the non-critical nature of the various 5' substitutions used for tethering labels to a nucleic acid. Carico discloses, for example at col. 7, lines 15 and 22, that R1 is "a bond or a chain."

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to use an alkyl chain, or other relatively non-reactive organic group, between the oxygen and the nitrogen of the Urdea linkage because, lacking a showing of criticality, or other secondary consideration, the claimed alkyl chain is considered one of several alternative linkages, any one of which the art skilled would reasonably expect to function.

8. Claims 5 and 19 are rejected under 35 U.S.C. § 103 as being unpatentable over Urdea and Carico as used above, and further in view of applicants admissions.

Claims 5 and 19 further limit there respective base claims to recite a "phthalimido" side group. Applicant admits that this is known in the art at page 12, lines 6-14 of the specification as a protecting group. It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to use phthalimido group to protect the amine groups during the organic synthesis process.

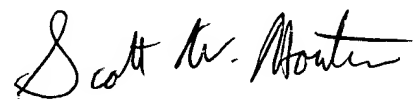
9. Papers relating to this application may be submitted to Group 1800 by facsimile transmission. Papers should be faxed to Art Unit 1809. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Art Unit 1809 Fax number is (703) 305-7401.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Houtteman whose telephone number is (703) 308-3885. The examiner can normally be reached on Tuesday-Friday from 8:30 AM - 6:00 PM. The examiner can also be reached on alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Elliott, can be reached at (703) 308-4003.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Scott Houtteman
December 11, 1996



SCOTT W. HOUTTEMAN
PATENT EXAMINER
GROUP 1800